



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER OF PATENTS AND TRADEMARKS
Washington, D.C. 20231
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/538,354	03/29/2000	Stefan P. Swierkowski	IL-10475	6131

7590

07/29/2002

Alan H Thompson
Patent Attorney
Lawrence Livermore National Laboratory
PO Box 808 - L-703
Livermore, CA 94551

EXAMINER

NOGUEROLA, ALEXANDER STEPHAN

ART UNIT

PAPER NUMBER

1743

DATE MAILED: 07/29/2002

S

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/538,354

Applicant(s)

SWIERKOWSKI, STEFAN P.

Examiner

ALEX NOGUEROLA

Art Unit

1743

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 01 May 2002.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 29 March 2000 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☐ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449) Paper No(s) _____
- 4) ☐ Interview Summary (PTO-413) Paper No(s) _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: _____

Response to Amendment

1. Applicant's amendment of May 01, 2002 does not render the application allowable.

Response to Arguments

2. Applicant's arguments filed May 01, 2002 have been fully considered but they are not persuasive. With respect to the rejection of Claims 1-5, 9-15, 18, and 19 under 35 U.S.C. §102(e) as being anticipated by Simpson et al., applicant argues that Simpson et al. do not teach each channel having an injection point connected to each of a sample well, a waste well, the cathode, and an anode. See page 4 of the amendment. The examiner respectfully disagrees. First, as stated in the previous Office action "waste" and "sample" are arbitrary labels; that is, barring other claim language or disclosure, a waste well can be taken to be structurally the same as a sample well. Second, in any event, Simpson et al. teach the allegedly missing features. Figure 2 of Simpson et al. shows details of one grouping of wells and channels in the large micro-plate array of Figure 1. In Figure 2 there are four injection points (the channel intersections; see applicant's specification page 3, lines 13-18 where loading points may be "T" or "Cross (+) junctions), at least one for each channel, that are each connected to two cathodes, two anodes, four sample reservoirs (200, 204, 220, 224), and one waste reservoir (208).

With the respect to the rejection of Claims 6-8, 16, and 17 under 35 U.S.C. §103(a) as being obvious over Simpson et al. in view of Zanzucchi et al., applicant relies on his argument against Simpson et al. in response to the rejection of Claims 1-5, 9-15, 18, and 19. The

Art Unit: 1743

Examiner in turn relies on his rebuttal presented in the previous paragraph. The examiner inadvertently left out the numerals 16 and 17 from the preamble of section 6 of the last Office action.

With respect to the rejection of Claims 20, 21, 23, and 27 under 35 U.S.C. §103(a) as being obvious over Simpson et al. applicant relies on his argument against Simpson et al. in response to the rejection of Claims 1-5, 9-15, 18, and 19. The Examiner in turn relies on his rebuttal presented above. It seems that applicant also understood the examiner to imply, at least with respect to the rejections of Claims 16 and 17, that the Simpson et al. do not teach waste wells. See third full paragraph on page 5 of the amendment (“the Examiner recognizes in the comments relative to Claims 16 and 17 that the injection point of Simpson et al. is only connected to a sample well, the cathode, and an anode.”). As seen in Figures 1 and 2, Simpson et al. clearly teach waste wells (element 208 in Figure 2 and the center well in each grouping of wells in Figure 1).

With respect to the rejection of Claims 22, 24, 25, and 28. Applicant relies on his argument against Simpson et al. in response to the rejection of Claim 20. The Examiner in turn relies on his rebuttal presented above.

Status of the Rejections Applied in the Office Action of February 28, 2002

3. All of the claim objections are withdrawn.
4. All of the rejections under 35 U.S.C. §112 are withdrawn.

Art Unit: 1743

5. All of the rejections under 35 U.S.C. §102(e) and 35 U.S.C. §103(a) are maintained. The rejections of Claims 1-5, 9-15, 18, and 19 under 35 U.S.C. §102(e) have been restated below so that new Claims 29-34 may be rejected.

Claim Rejections - 35 USC § 102

6. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

7. Claims 1-5, 9-15, 18, 19, 29-34 are rejected under 35 U.S.C. 102(e) as being clearly anticipated or anticipated by Simpson et al. (US 6,143,152) ("Simpson"). For the claimed features see the abstract; Figures 1-3D and 8; and column 7, lines 54-67. For example, in Figure 2 there are four injection points (the channel intersections; see applicant's specification page 3, lines 13-18 where loading points may be "T" or "Cross (+) junctions), at least one for each channel, that are each connected to two cathodes, two anodes, four sample reservoirs (200, 204, 220, 224), and one waste reservoir (208).

Note that article claims must rely upon the overall physical structure or limitations for patentability not on the intended use thereof - Ex parte Wikdahl, 10 USPQ2d 1546; In re Casey, 152 USPQ 235; In re Finsterwalder, 168 USPQ 530; In re Lampert, 114 USPQ 163; In re Otto, 136 USPQ 458; In re Pearson, 181 USPQ 641; In re Yanush, 177 USPQ 705. So, barring evidence to the contrary, a "sample" well is structurally the same as a "waste" well, only the

Art Unit: 1743

intended use is different. In any event, Simpson clearly teaches twice as many sample wells as waste wells. See col. 7, ll. 54-57.

For Claim 3, note that a well comprises a hole by definition.

For Claims 18 and 19, note that from the specification page 8, lines 17-18 “bias” is taken to mean electrical bias. A common bias for the wells and samples is implied by Figure 8, which shows shared anode and cathodes (elements 614, 616, and 630).

For Claims 29 and 30, note that several pairs of functionally identical channels are shown in Figure 2, for example. In Figure 2 there are a pair of cathode channels, a pair of anode channels, a pair of lower sample channels (directly connected to wells 220 and 224), and a pair of upper sample channels (directly connected to wells 200 and 204).

For Claim 31, waste well 208 in Figure 2 is an example of a common waste well in Simpson et al.

For Claim 32, in Figure 2 the arrangement of channels and wells is symmetrical about a vertical axis and a horizontal axis, so the corresponding channels of the mirror-images will inherently have the same lengths.

Art Unit: 1743

For Claim 33, note in Figure 2 that the waste well (208) is in the center of the "rectangle" formed by sample wells formed by the sample wells (200, 204, 220, and 224).

For Claim 34, note that the waste well (208) is offset from sample wells (200, 204, 220, 224).

Final Rejection

8. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.


Art Unit: 1743

9. Any inquiry concerning this communication or earlier communications from the examiner should be directed to ALEX NOGUEROLA whose telephone number is (703) 305-5686. The examiner can normally be reached on M-F.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, JILL WARDEN can be reached on (703) 308-4037. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7719 for regular communications and (703) 305-5433 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0661.

Alex Noguerola
July 24, 2002


Jill Warden
Supervisory Patent Examiner
Technology Center 1700